

App. No. 09/537,948  
Art Unit: 2644

Docket No. 1999-0104

**In the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method of deploying filters for use in processing audio signals, comprising:

calculating a filter for each of a plurality of frequency bands;

determining a distance between coefficients of filters in adjacent frequency bands;

and

merging filters with a shortest distance between coefficients to produce a set of final filters;

determining whether a stronger signal is mixed with one or more weaker signals in frequency bands covered by the final filters; and

recalculating ones of the final filters determined to have a stronger signal mixed with one or more weaker signals in a corresponding frequency band, the ones of the final filters being recalculated for the respective stronger signal.

2. (Original) The method of claim 1, wherein said filters are TNS filters.

3. (Original) The method of claim 1, wherein said coefficients are PARCOR coefficients.

4. (Previously Presented) The method of claim 1, wherein said merging involves calculating a new filter for a frequency range comprising said adjacent frequency bands of said filters with said shortest distance.

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5. (Currently Amended) A method of deploying filters for use in processing audio signals, comprising:

calculating a filter for each of a plurality of frequency bands;

comparing coefficients of filters in adjacent frequency bands to identify a pair of filters with a shortest Euclidean distance between coefficients;

merging said pair of filters to produce a set of final filters;

d) — repeating all previously recited acts until a predetermined number of total filters is reached;

determining whether a stronger signal is mixed with one or more weaker signals in frequency bands covered by the final filters; and

recalculating ones of the final filters determined to have a stronger signal mixed with one or more weaker signals in a corresponding frequency band, the ones of the final filters being recalculated for the respective stronger signal.

6. (Original) The method of claim 5, wherein said coefficients are PARCOR coefficients:

7. (Previously Presented) The method of claim 5, wherein said merging involves calculating a new filter for a frequency band comprising said adjacent frequency bands of said filters with said shortest Euclidean distance.

8. (Currently Amended) The method of claim 5, further comprising:

~~after said predetermined number of filters is reached, recalculating at least one of said filters using only those frequencies corresponding to a strongest signal within a frequency range covered by said at least one of said filters; and~~

using at least one of said recalculated ones of the filters filter for an entire extent of

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said frequency range.

9. (Original) The method of claim 8, wherein said strongest signal is identified based on /  
energy/bin within said frequency range.

10-13. (Canceled)

14. (Currently Amended) ~~The A method of claim 1, further of deploying filters for use in~~  
~~processing audio signals, comprising:~~

calculating a filter for each of a plurality of frequency bands;  
clustering the filters into at least two groups; and  
using a centroid of each of the at least two groups as a final filter for a plurality of  
frequency ranges covered by each respective one of the at least two groups.

15. (Canceled)

16. (New) The method of claim 14, wherein clustering the filters into at least two groups  
further comprises:

clustering the filters based on respective PARCOR coefficients of the filters.

17. (New) The method of claim 14, wherein clustering the filters into at least two groups  
further comprises:

clustering the filters based on energies in each of the frequency bands covered by the  
filters.